

**Ka-Band Propagation Studies Using the ACTS
Propagation Terminal and the CSU-CHILL
Multiparameter Radar**

Experimenters

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**ACTS Propagation Studies Workshop
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Oklahoma City, OK**

Outline

- CSU-APT Status Report
 - Terminal Update
 - Processing Update
- CSU-APT Attenuation Data
 - Comparison of data using APT weather files and external weather files
 - 1998 Data
 - Comparisons using local rain data for 1994
- Preliminary Melting Layer Studies

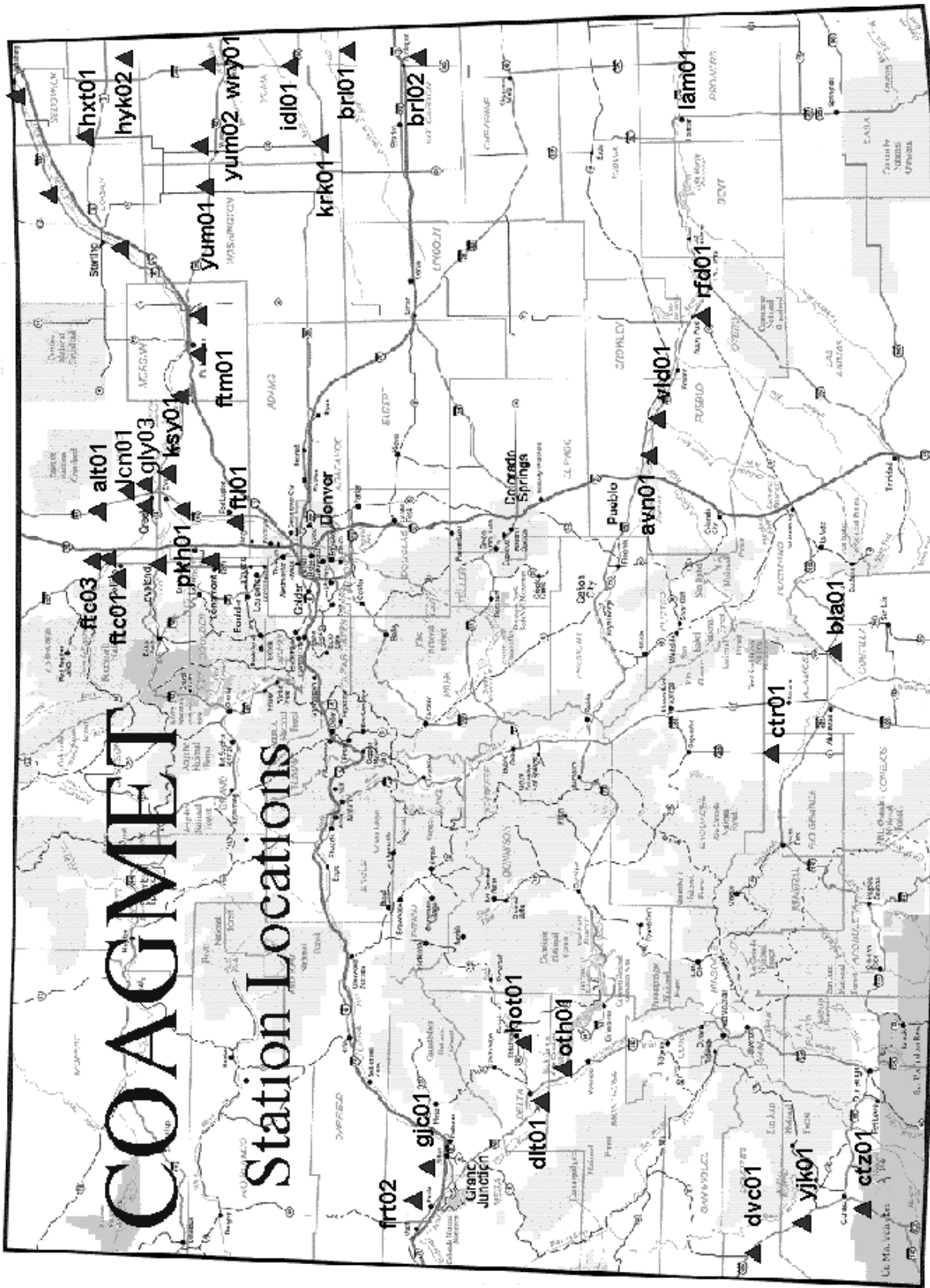
CSU-APT Site Location

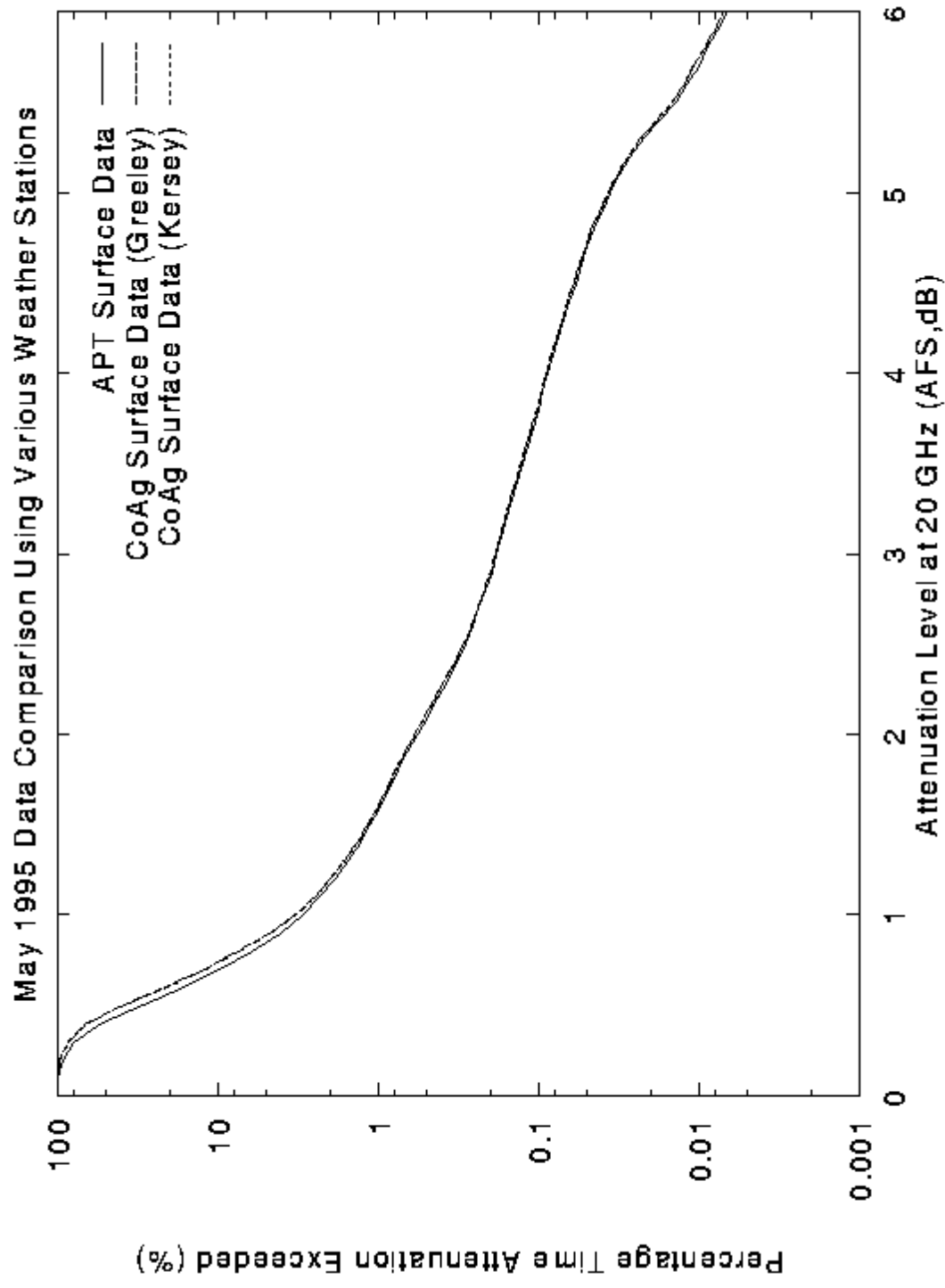


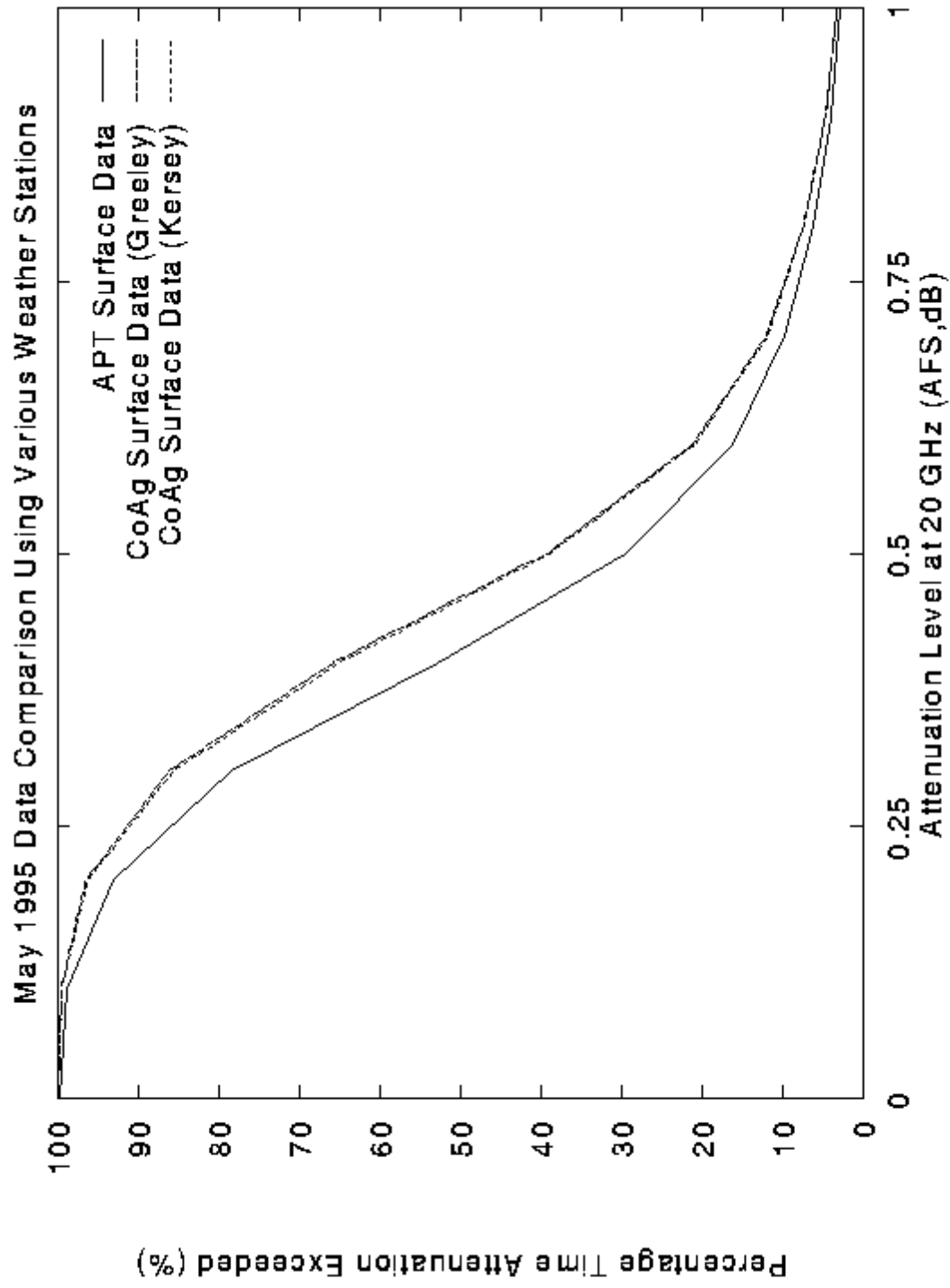
- CSU-APT is located about 30 km southeast of Fort Collins near LaSalle, Colorado (approx. 13 km south of the CSU-CHILL radar)
- APT elevation angle - 43 deg
- APT azimuth angle - 173 deg
- Altitude 1.52 km

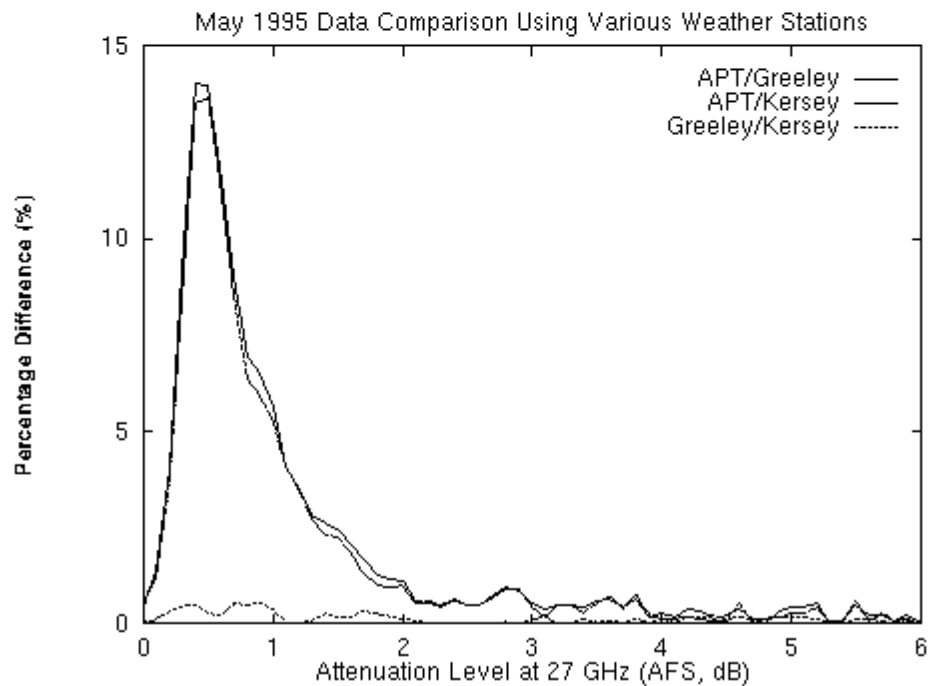
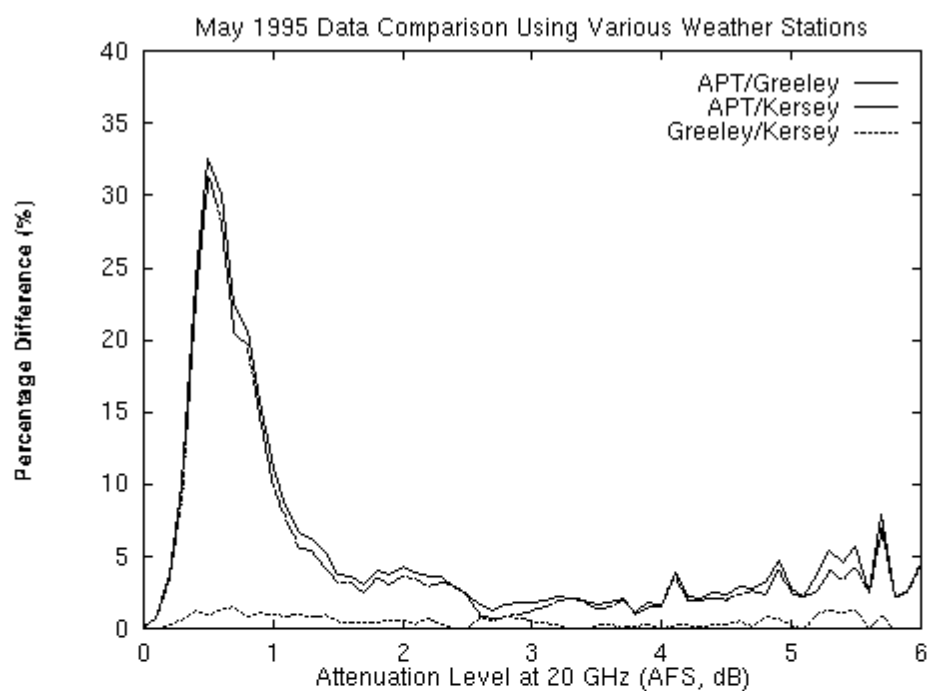
CSU-APT Status Report

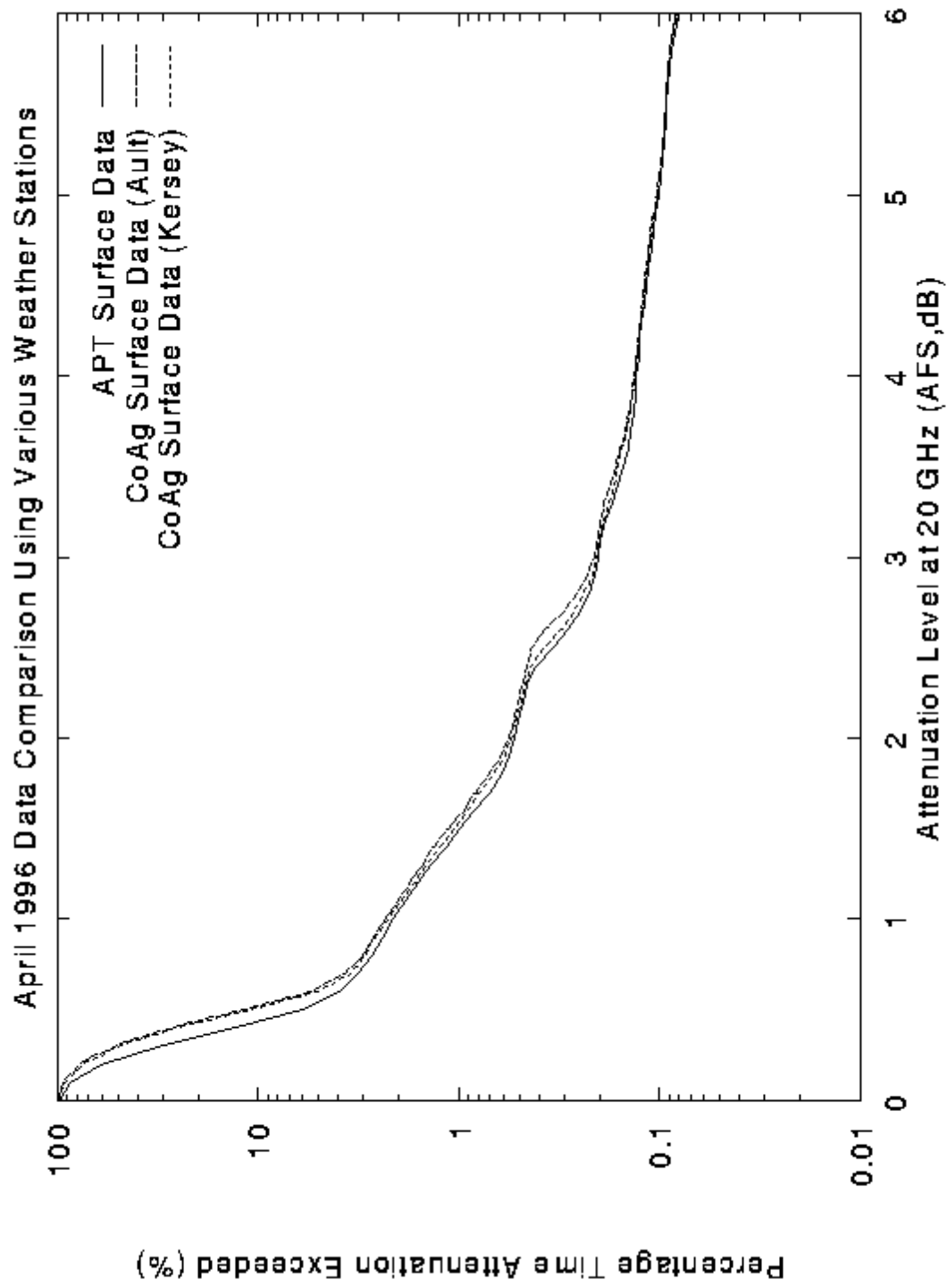
- Terminal Status
 - replacement of WWV time card solved rebooting problems (re-seating the card was solution)
 - no major problems with collection system
- Processing Status
 - Data through August 1998 have been processed
 - Data from October 1994 through May 1996 have been reprocessed using external weather

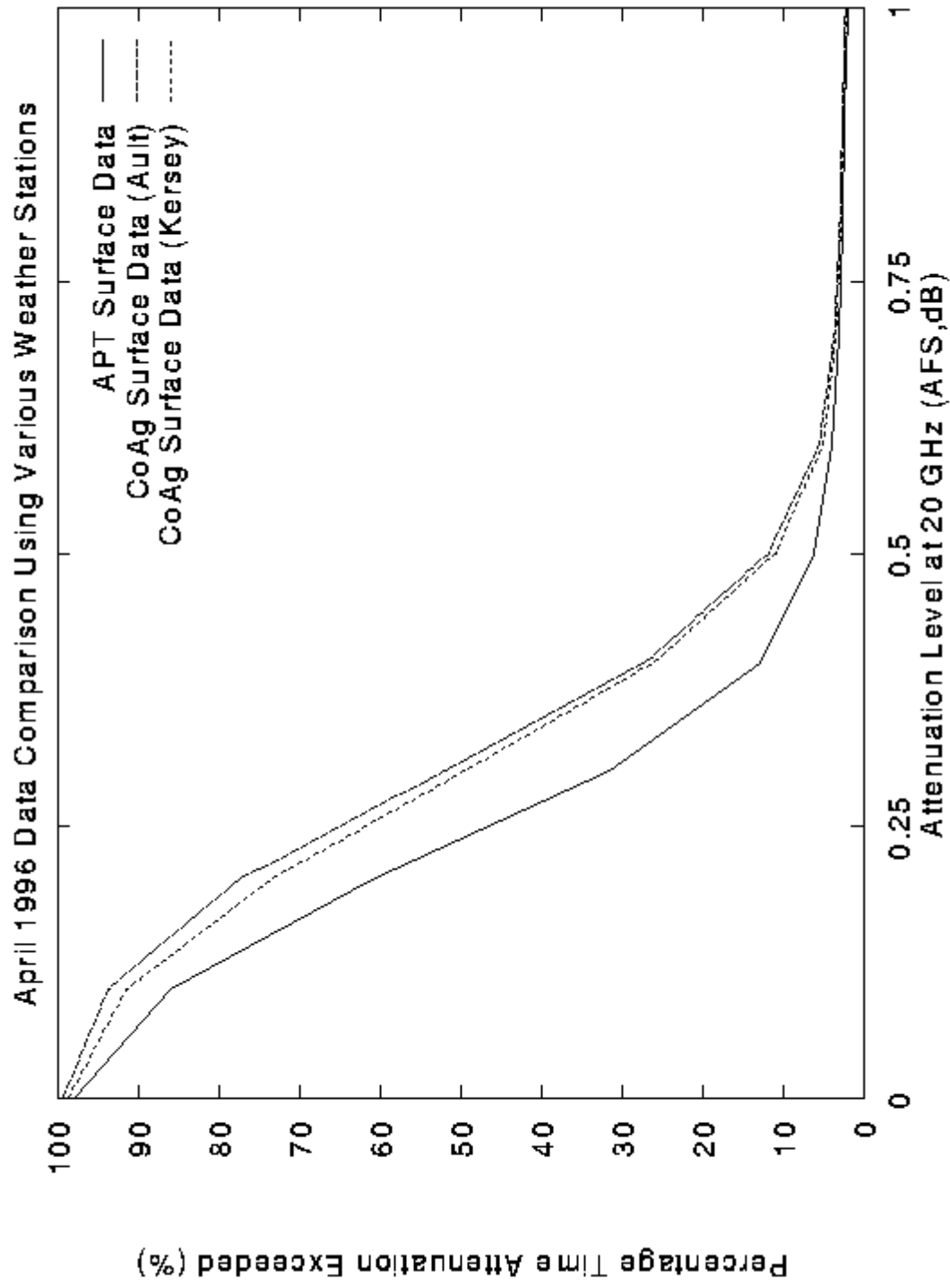


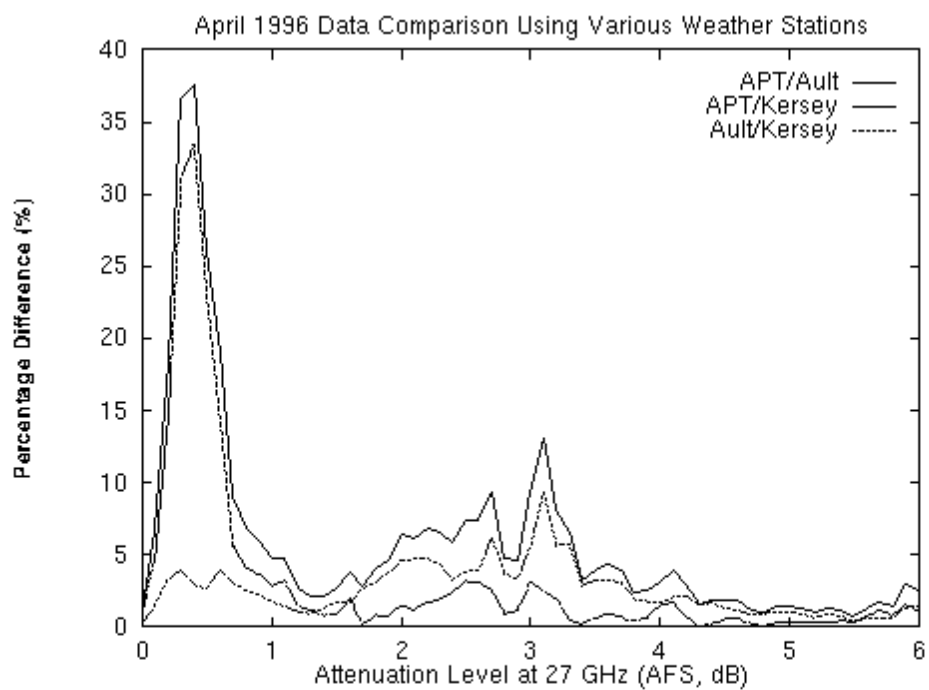
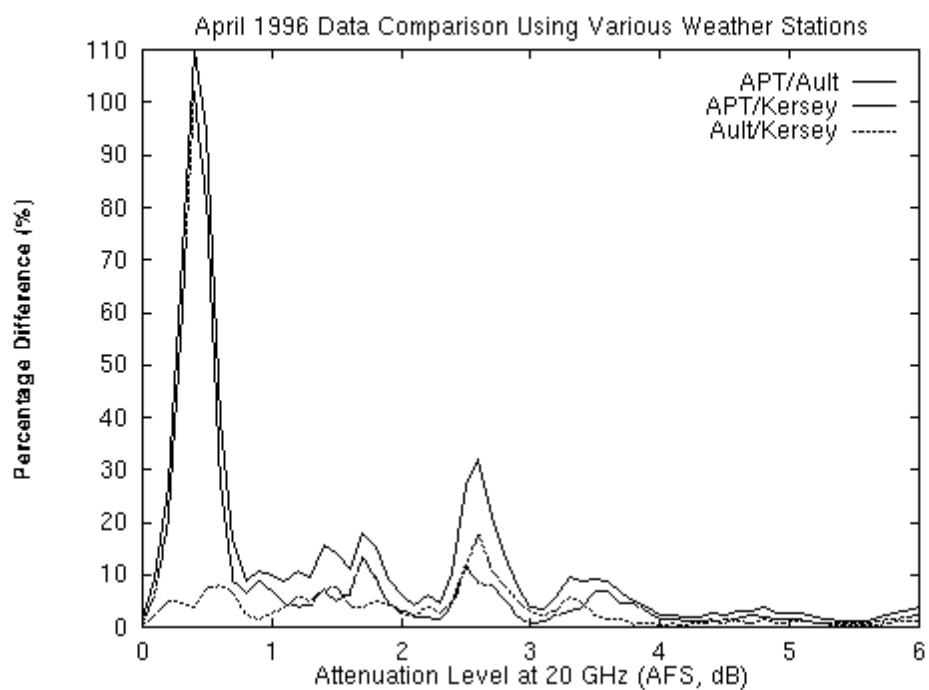


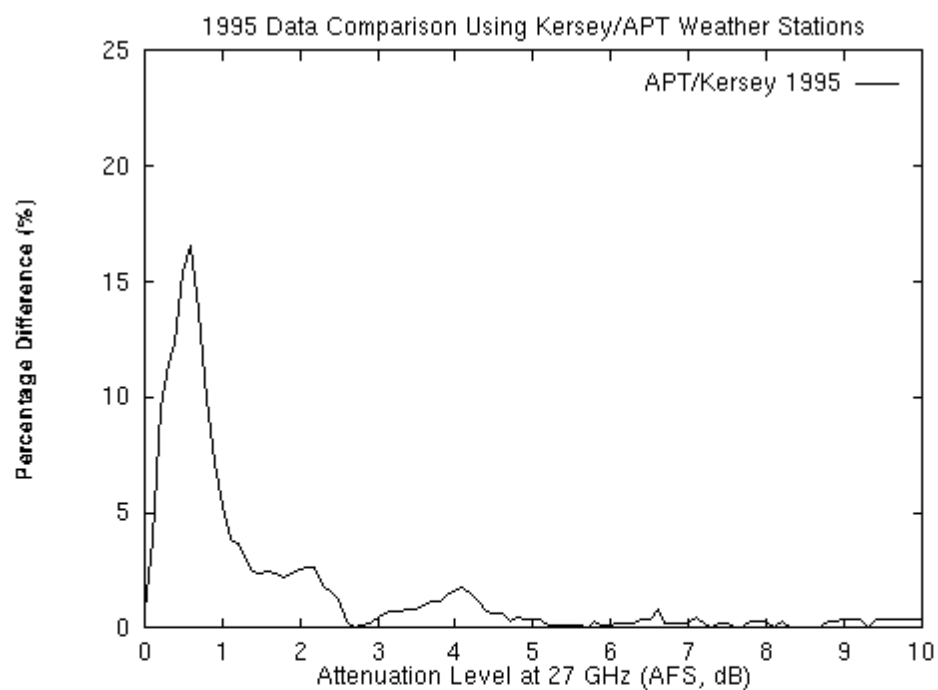
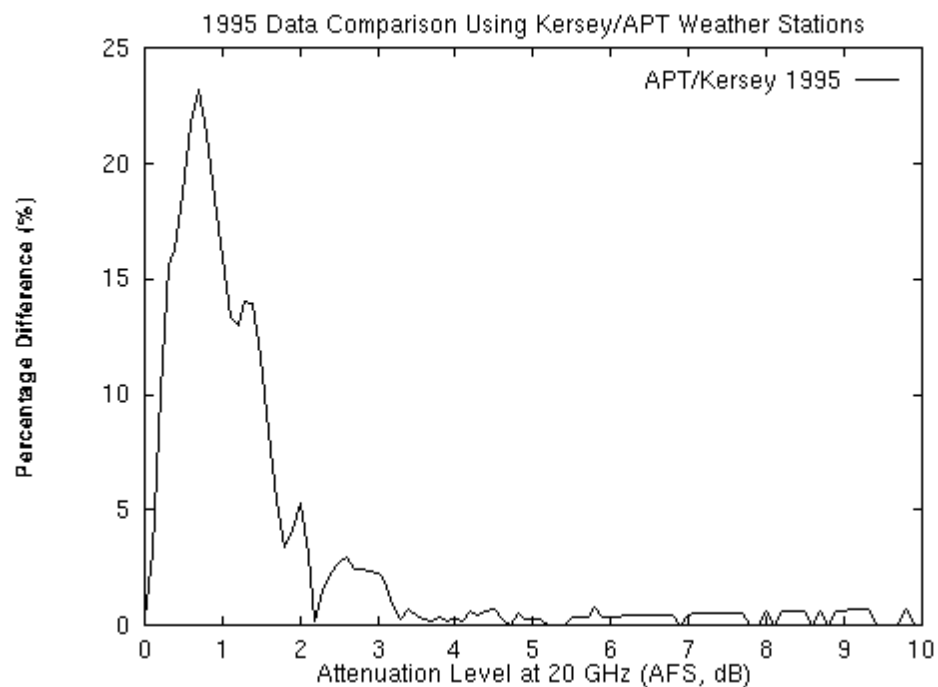


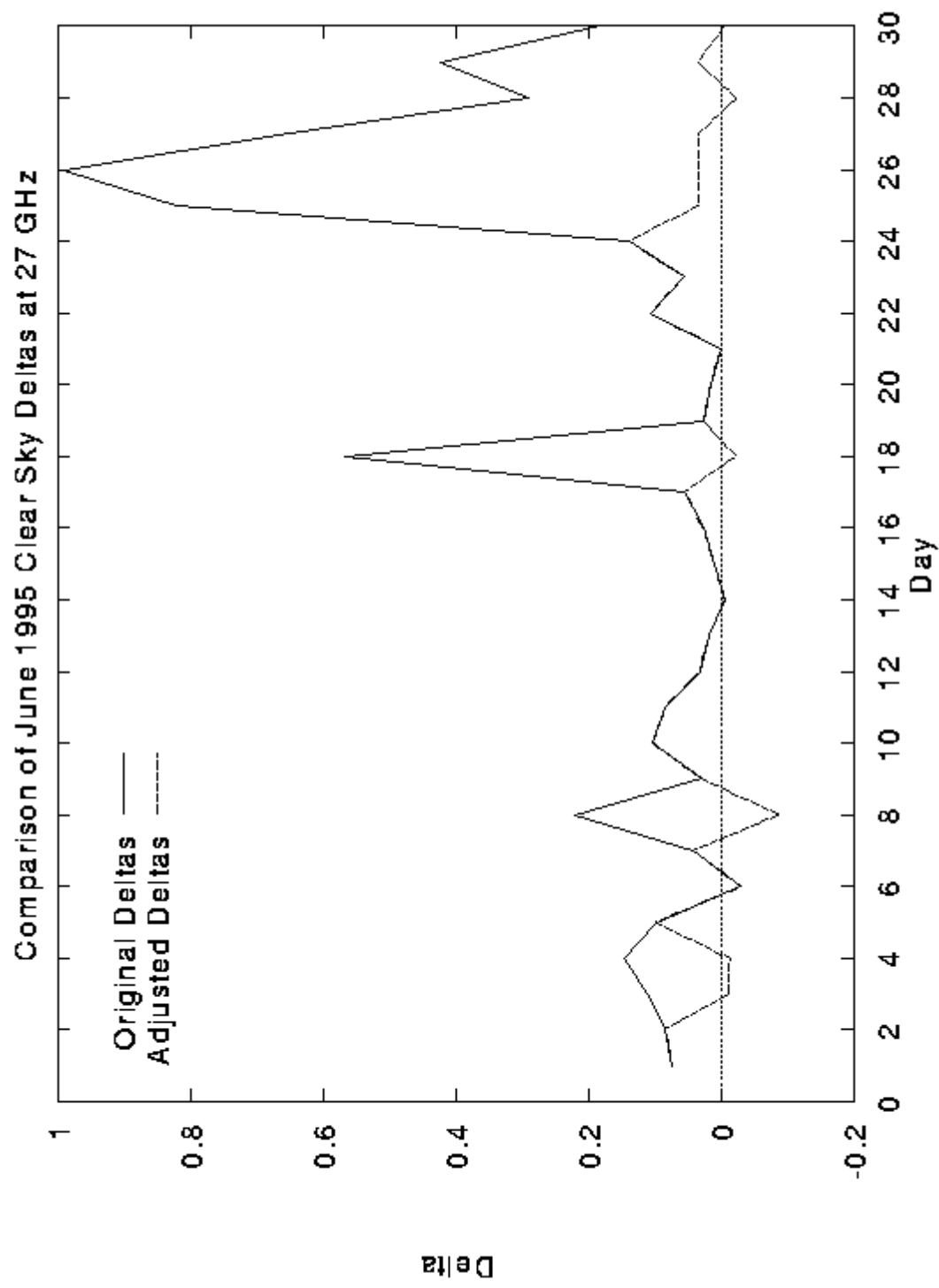


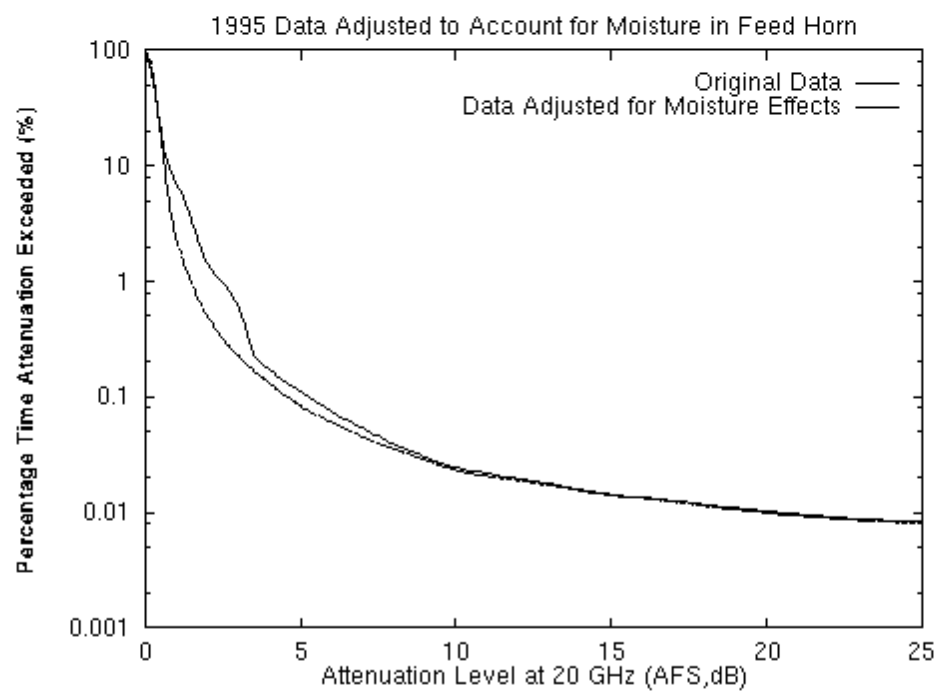
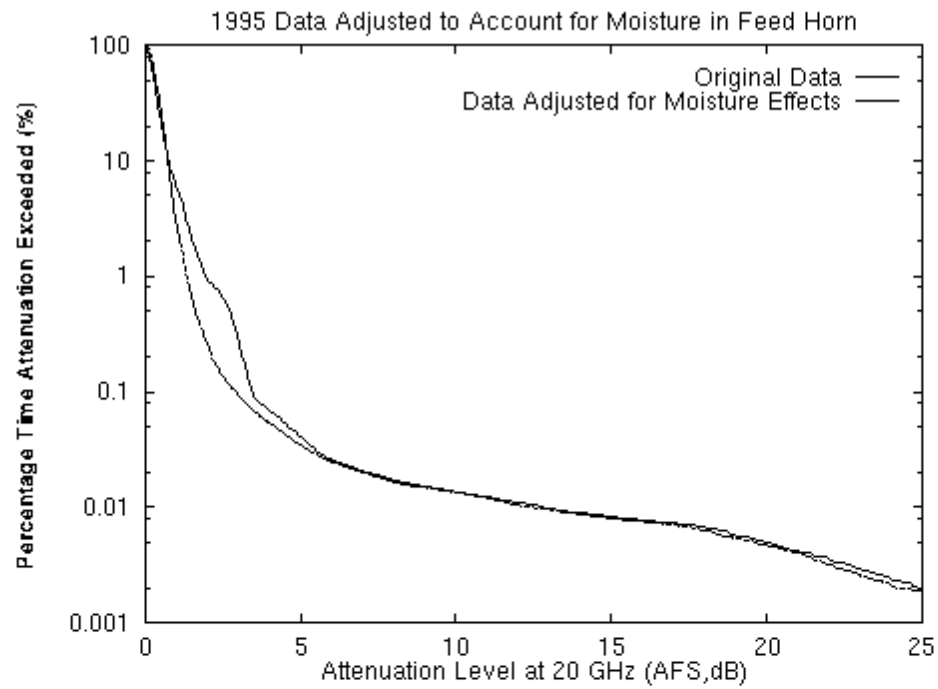


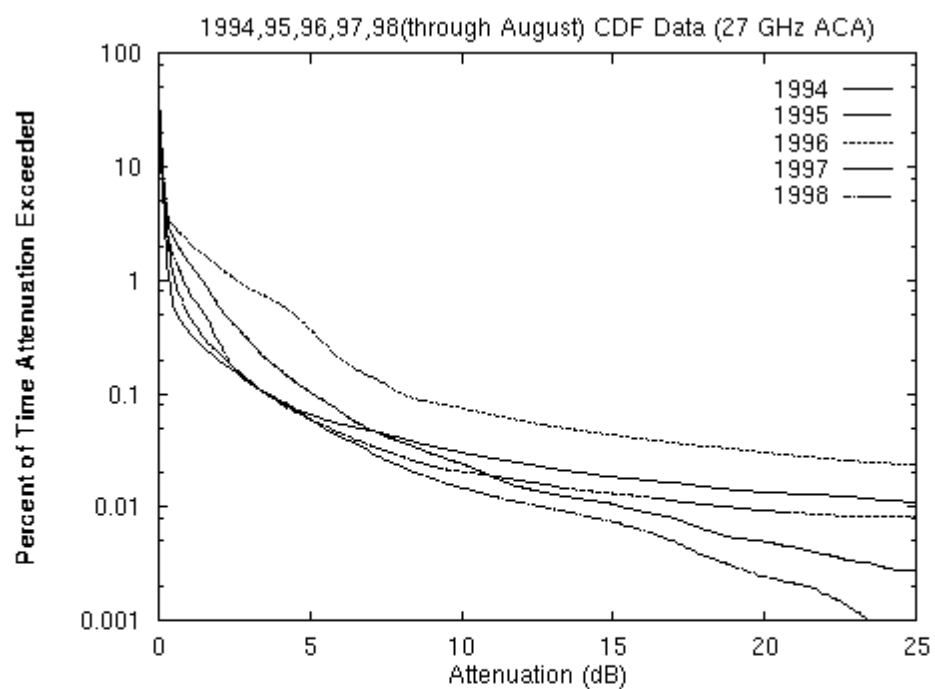
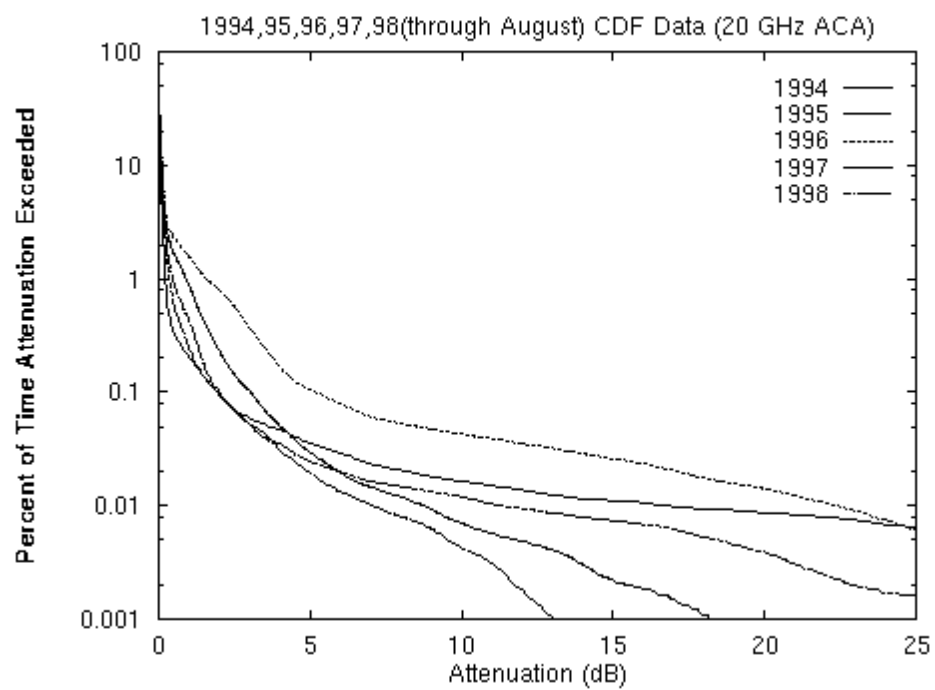


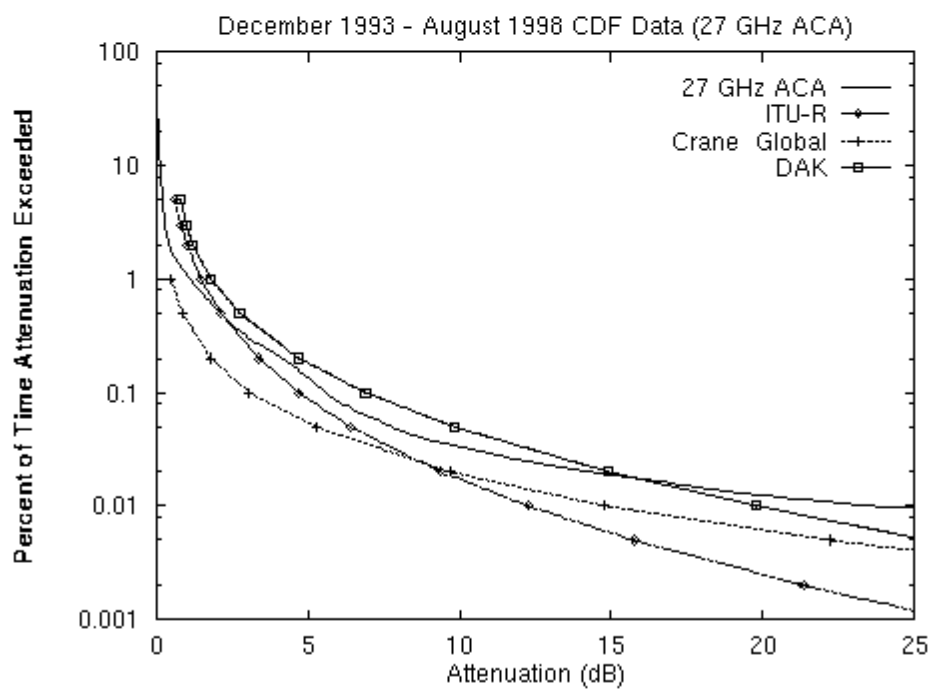
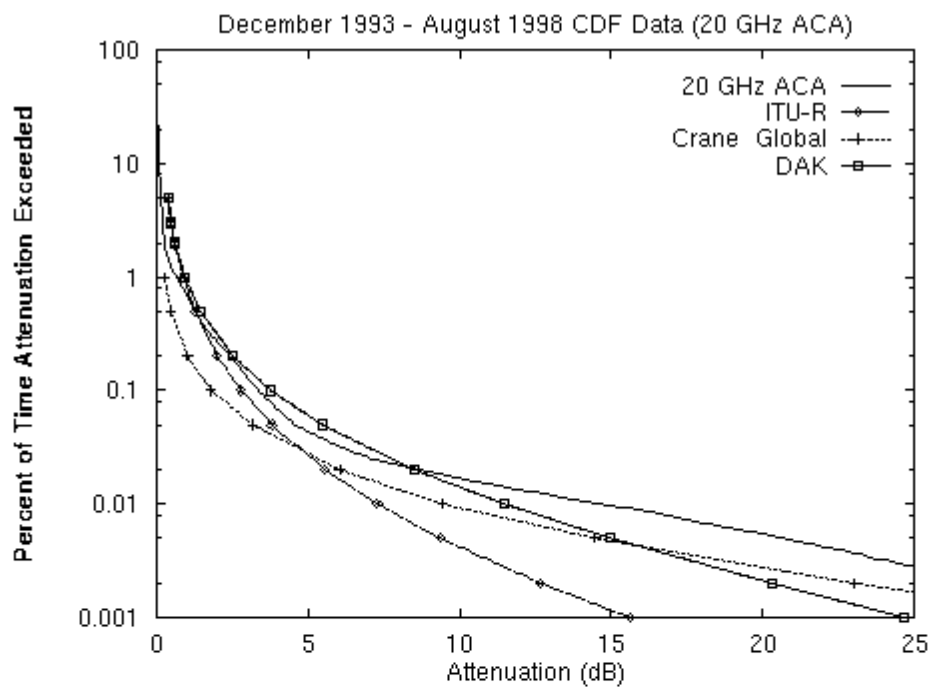


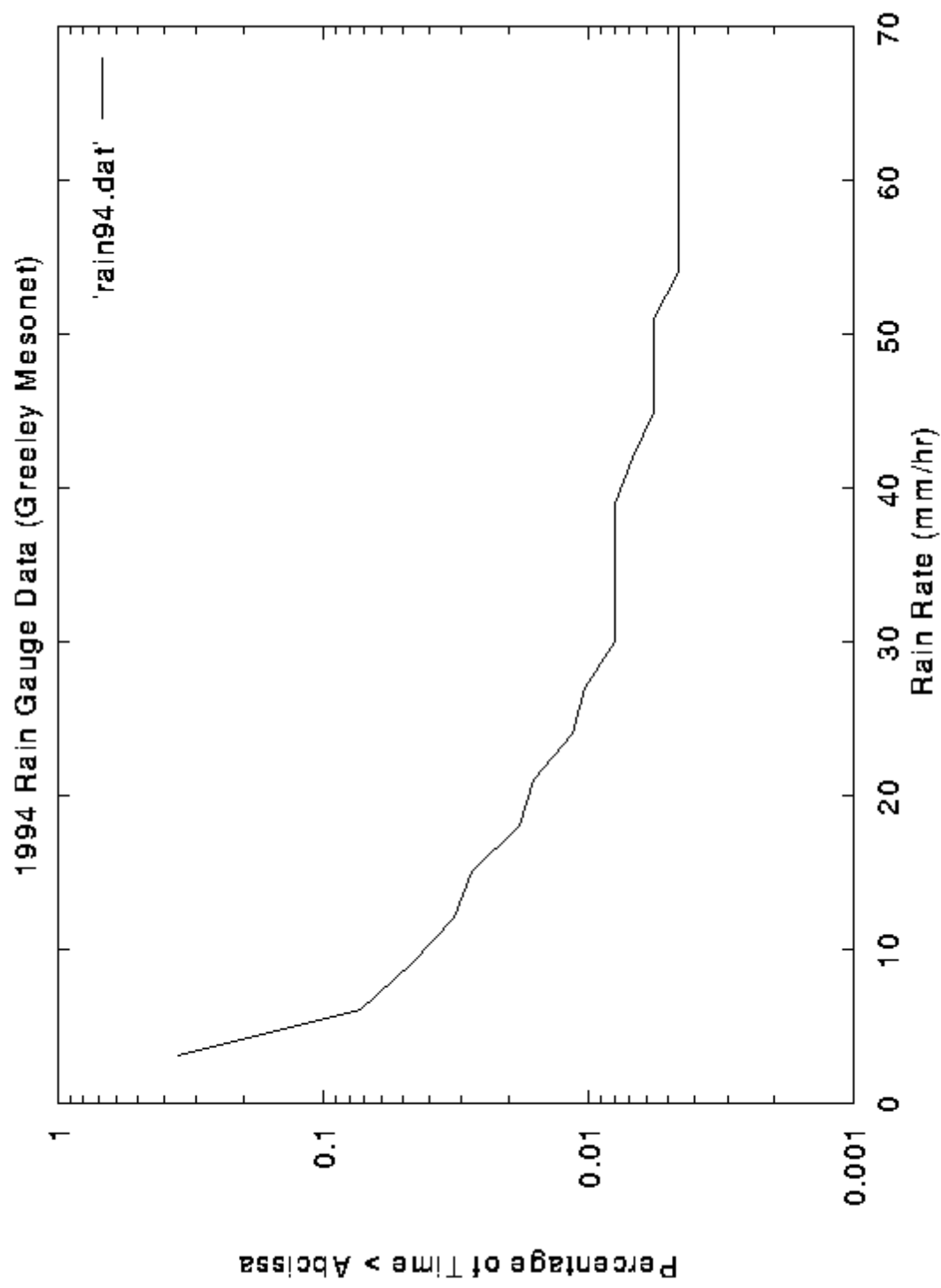


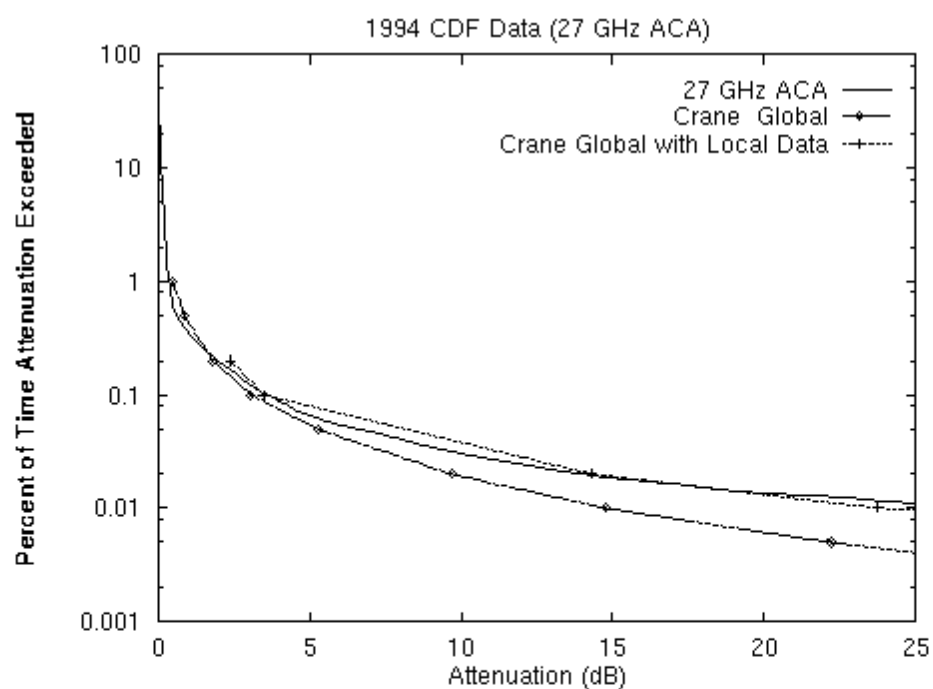
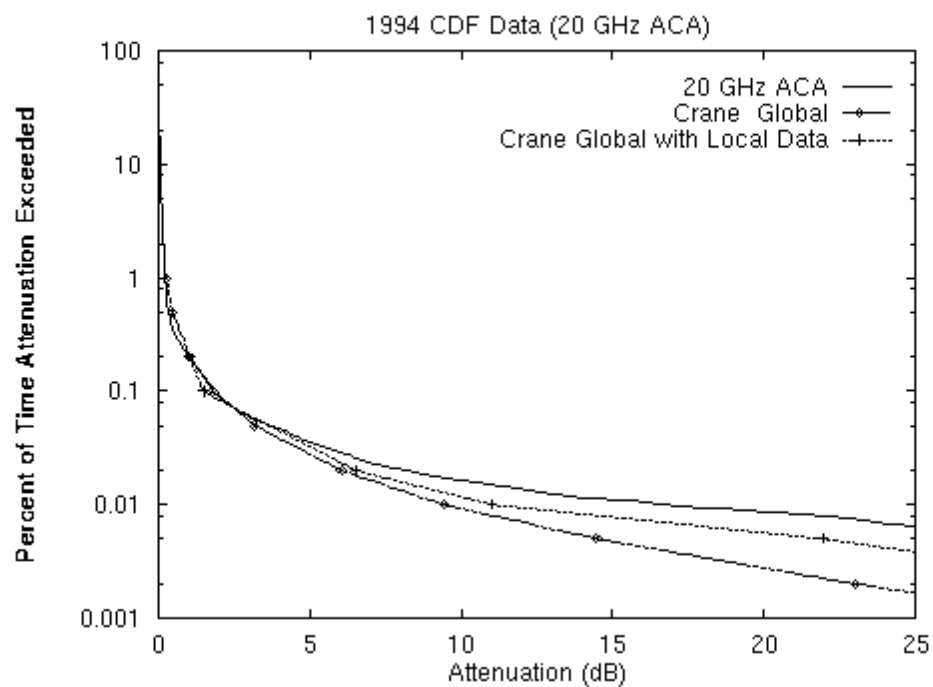


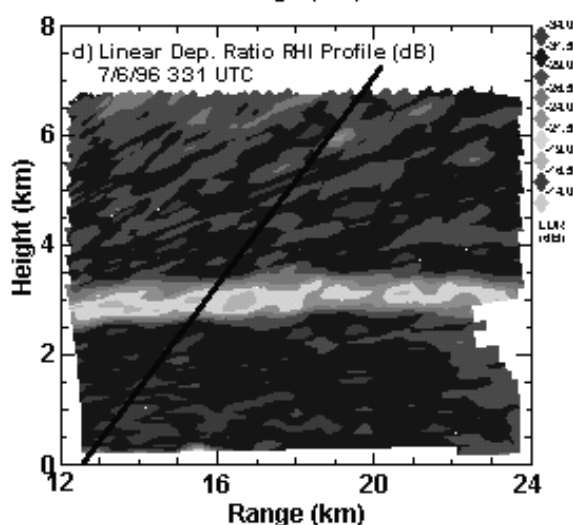
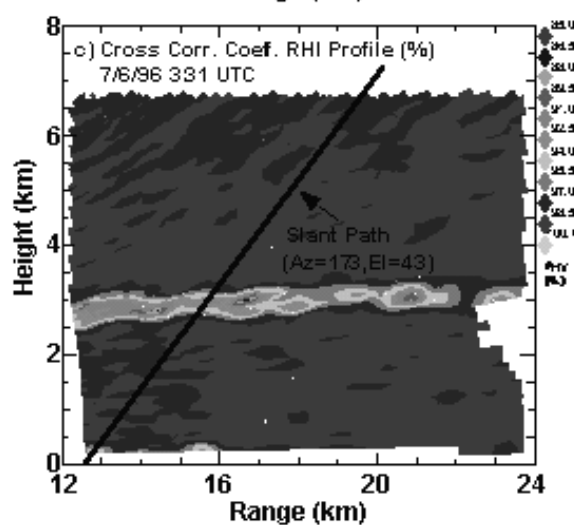
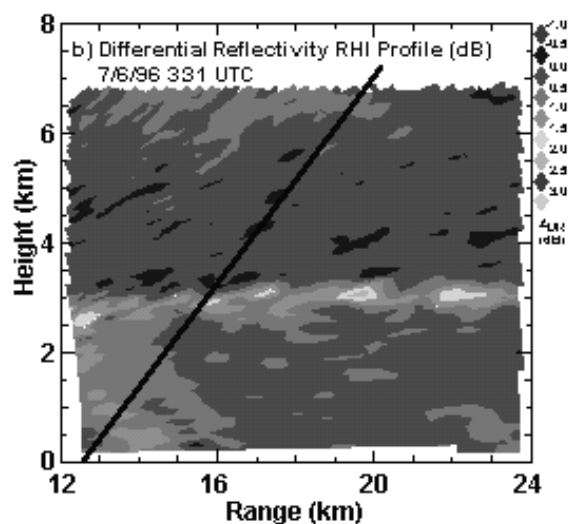
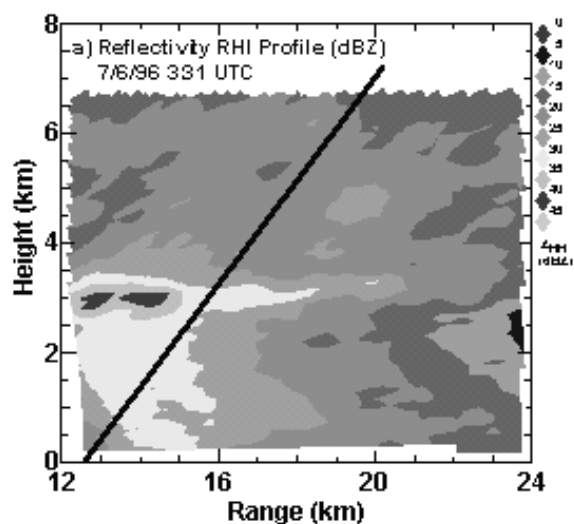




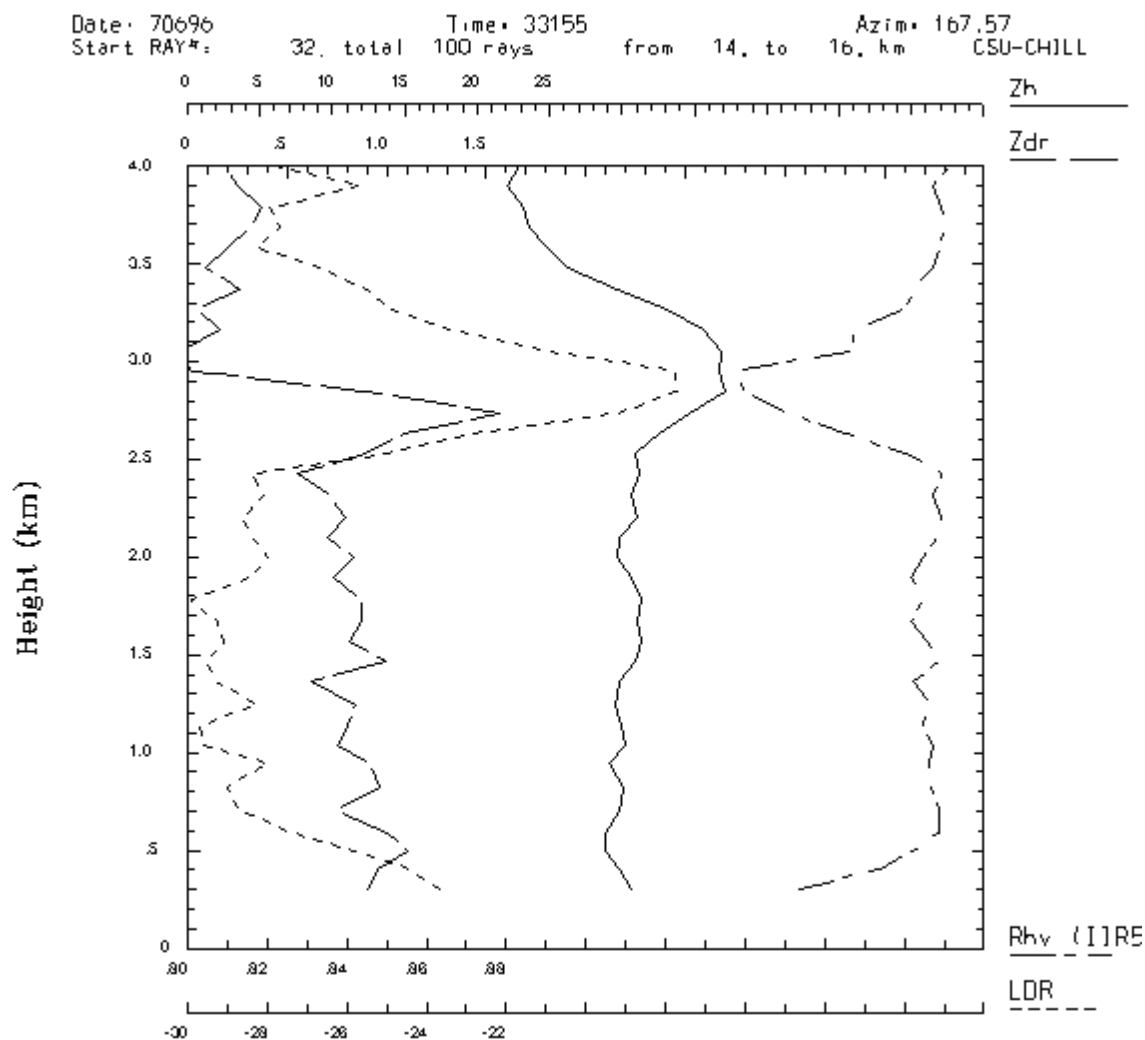








July 6, 1996 Vertical Profile Plot



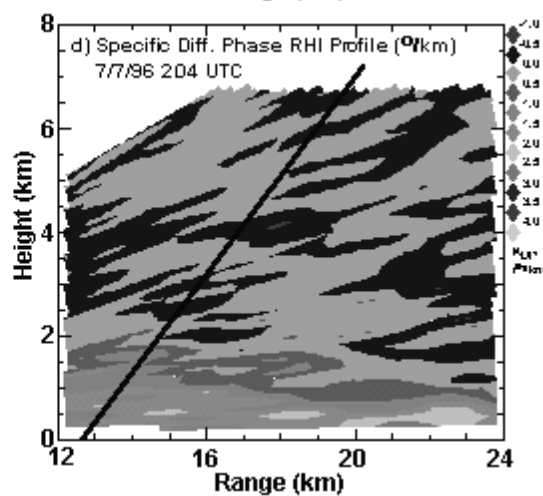
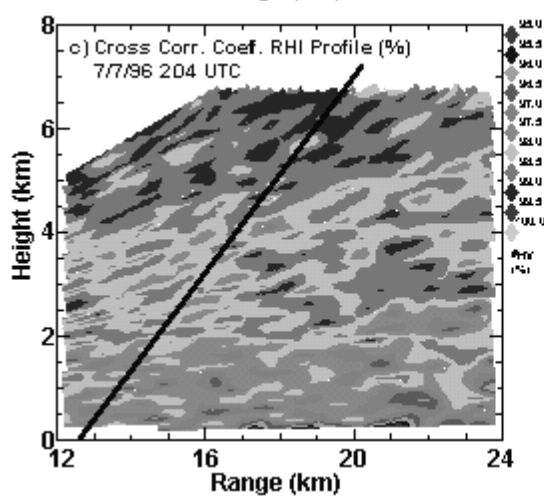
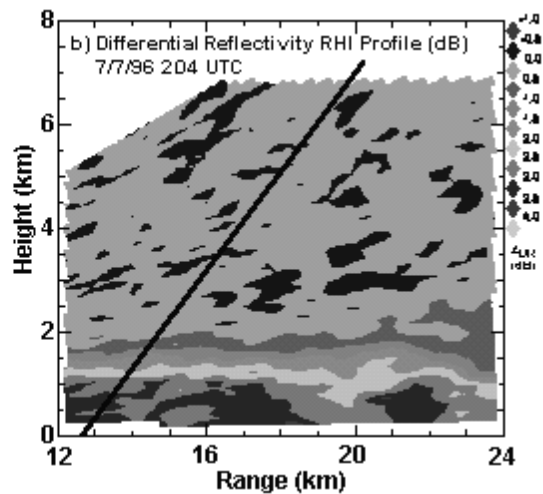
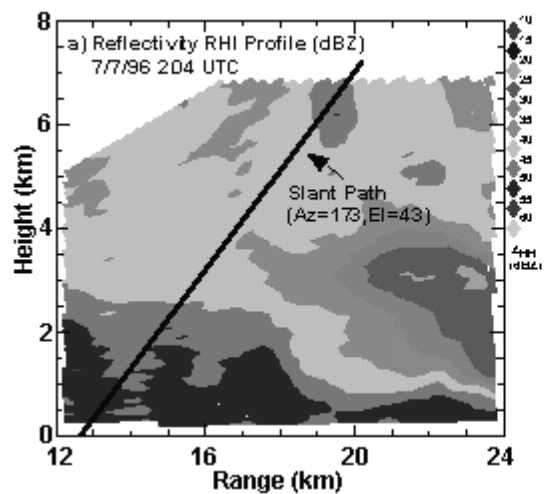
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 Ldr.T = 0.dB

Ra.T= 0.90
 Zh.T= 0 dB

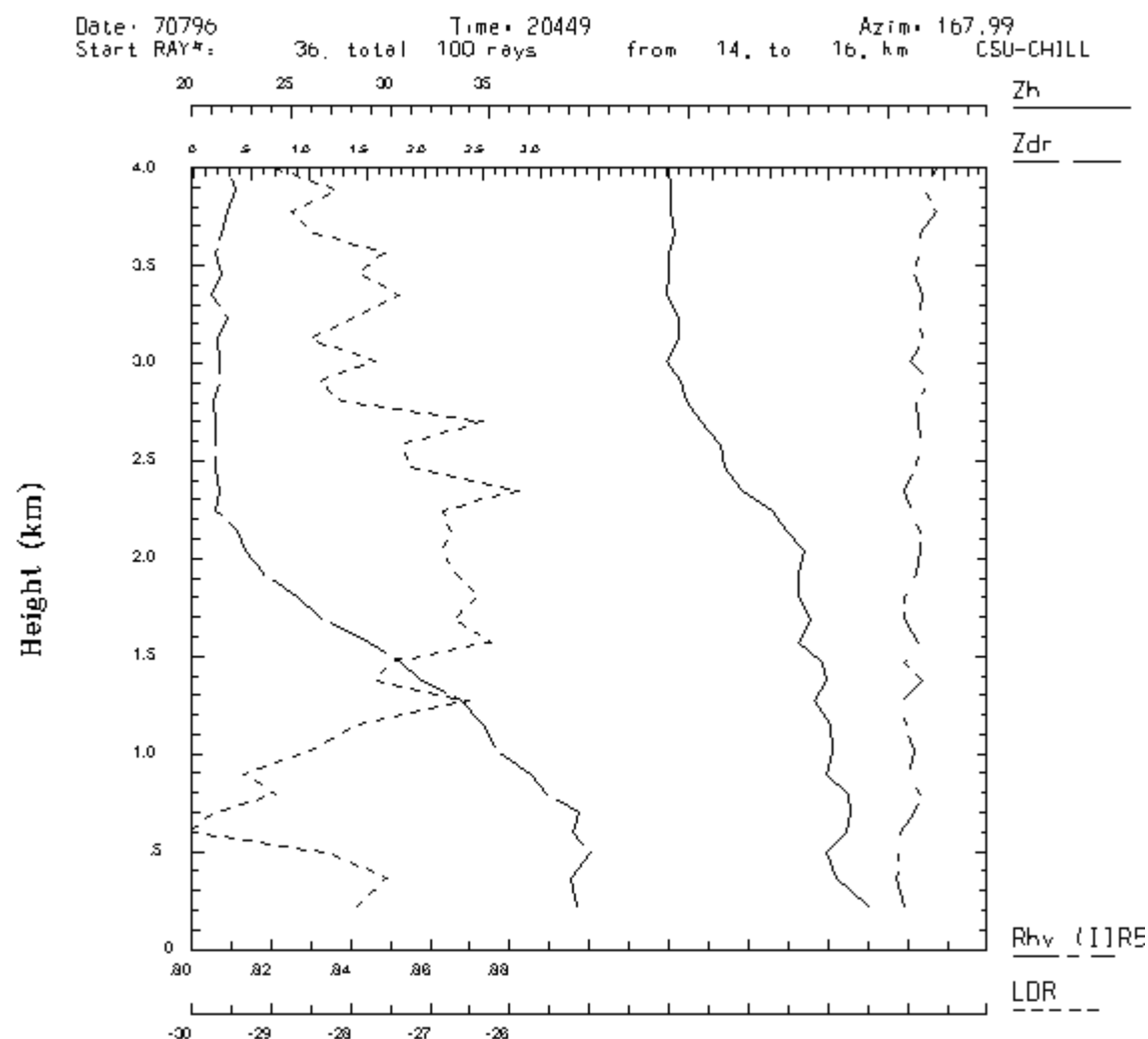
Zslope= 40.dB
 Madflt = 2

RCcf= 0.00dB
 DfrC= 0.00dB

jul596v262.ch1



July 7, 1996 Vertical Profile Plot



Phr.dp.T= 3,deg
 Dfr.T = 0,dB
 Ldr.T = 0,dB

Ra.T= 0,90
 Zh.T= 0 dB

Zslope= 40,dB
 Madflt = 2

RCcf= 0,00dB
 DfrC= 0,00dB

jul696v514.ch1